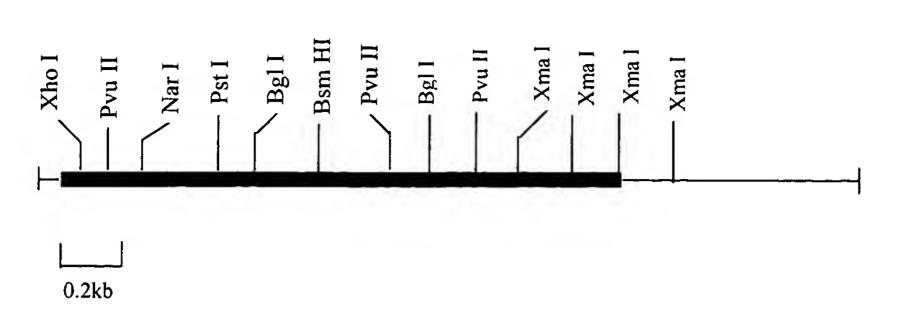
Title: MODEL SYSTEMS FOR NEURODEGENERATIVE AND CARDIOVASCULAR DISORDERS

Inventors Name: Perez, et al.; Application Serial No.: 10/052,589 Attorney Docket Number: 26473/04200



Fig. 1A



GG	GCG	-12 GAC	TCT	AAA	ATG M	AAT N	CCC P	GAT D	CTG L	GAC D	ACC T	GGC G	CAC H	AAC N	ACA T	TCA S	GCA A	39
CCT P	GCC A	CAA Q	TGG W	GGA G	GAG E	TTG L	AAA K	GAT D	GCC A	AAC N	TTC F	ACT T	GGC G	CCC P	AAC N	CAG Q	ACC T	93
TCG S	AGC S	AAC N	TCC S	ACA T	CTG L	CCC P	CAG Q	CTG L	GAC D	GTT V	ACC T	AGG R	GCC A	ATC I	TCT S	T GTG V	GGC G	147 201
CTG L	GTG V	CTG L	GGC G	GCC A	TTC F	ATC I	CTC L	TTT F	GCC A	ATT	GTG V	GGC G	AAC N	ATC I	CTG L	GTC V	ATC I	255
CTG L	TCA S	GTG V	GCC A	TGC C	AAT N	CGG R	CAC H	CTG L	CGG R	ACG T	CCC P	ACC T	AAC N	TAC Y	TTC F	ATT	GTC V	309
AAC N	CTG L	GCC A	ATT	GCT A	GAC D	CTG L	CTG L	TTG L	AGT S	TTC F	ACA T	GTC V	CTG L	CCC P	TTC	TCC	GCT A	363
ACC T GCA	L GCG	GAA E GTG	GTG V GAC	CTT L GTC	GGC G CTG	TAC Y TGC	TGG W TGT	V ACG	CTG L GCC	GGG G TCC	CGC R ATC	ATC I CTG	TTC F AGC	TGT C	GAC D	ATC I GCC	TGG W	417
A TCC	A	V GAT	D CGC	V	L	C	C	T	A	S	I	L	S TAC	L	TGT C	A CTG	ATC I GTC	471
s ACC	I CGC	D AGG	R AAG	Y GCC	I	G	V GCA	R	Y	S	L GTG	Q TGG	Y GTT	P TTG	T	L ACG	V	525
T ATC		R ATC	K GGG	A CCT	I CTC	L CTT	A GGA	L TGG	L AAA	S GAA	V CCA	W GCG	V CCC	L AAC	S GAC	T GAC	V AAG	579
I GAA	S	I GGA	G GTC			L GAA		W	K	E GCC	P CTC	A TTT	P TCC	N TCC	D CTG		K TCC	633
	C TAC		V CCA	T	E GCG		P	F CTG		A ATG	L TAC	F TGC	S	S	L TAC	G ATC	S	687
F GCC A	Y AAG K	I AGG R	P ACC T	L ACC T	A AAG K	V AAC N	I CTG L	L GAG E		M GGA		C ATG	R AAG	V GAG	Y ATG		V AAC	741
A	K	K	T	1	K	IA	i.	Ŀ	Α	G	V	M	K	E	M	<u>S</u>	N	795

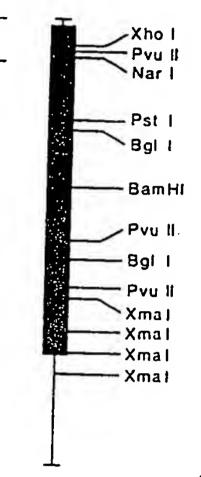
Fig. 1B

	CTC L	ACC T	GAC D	GAG E	CAT H	TTT F	AAC N	AAG K	TCC S	CAC H	ATC I	AGG R	CTG L	ACC T	CTG L	GAG E	AAG K	TCC S
849									ide		a. a		220	999		7.00	3 CID	אממ
	CTT L	AAA K	GTC V	GCT A	ATA I	TCC S	AGT S	AGG R	CCC	AAC N	CAC H	GGC G	AAG K	GCC A	AAG K	ACC T	AGT S	AGC S
903	ъ	K	V	A	_	5	٥		•	14	••	J				_	_	-
	GGA	GTC	GTG	ATT												TTC	AAG	TTT
057	G	V	V	I	G	L	T	K	A	A	K	K	E	R	S	F	K	F
957	CTG	TCC	GGG	СТТ	CCA	CTC	GCT	ATC	TTC	TTC	CCC	CTC	TGG	TGT	TTG	ATC	TTC	ATG
	L	S	G	L	P	L	A	I	F	F	P	L	W	С	L	I	F	M
1011					~	2=2					pept		000	770	OTIO:	7. OTT	TCC	TTC
		CTG	TGG W	TTC F	GTA V	GTG V	AAG K	TTC F	GTG V	GCC A	GAC D	CCG P	CCC P	AAG K	CTC L	ACT T	S	F
1065	G	L	W	Г	V	V	K	F	V	A	D	_	*	10		-	J	-
	TTC	GAG	AAG	AGC	TCC	TGC	CCG	TAC	ATC	ATC	CCC	AAC	CTG	TGC	AGC		TTC	
	F	E	K	S	S	С	P	Y	I	I	P	N	L	С	S	N	F	Y
1119	CGC	CGC	CGT	GGC	AGT	CCT	TGC	CAG	тсс	GGG	CTT	ATC	CGT	ATG	TTC	GCC	CGC	AAG
	R	R	R	G	S	R	C	Q	C	G	L	I	R	М	F	A	R	K
1173																		
	CGC						ACC			_			CTG	CGT			CGC R	GCG R
1 2 2 7	R	T	W	P	R	Y	T	Y	A	С	A	G	L	R	R	R	К	K
1227	GGC	AGC	GAC	GAC	CTG	TCC	GAC	AAG	GGG	TCG	CAG	TCG	CGA	GAG	CTG	TCG	GGC	GGC
	G	S	D	D	L	S	D	K	Ŕ	S	Q	S	R	E	L	S	G	G
1281		~~~		~~~		000	maa	000	OTT O	7.00	7.00	C	700	CCC	AGT	ATG	TGC	AGC
	GGC G	CCG P	AGC S	CCC	TCG S	GCG A	TCG S	P	L	T	AGG R	Q	AGC S	G	S	M	C	S
1335	G	E	5	_	5		J	-	_	-		~						
	TGG	GAA	CCC	TAC	GCC	TGC							GCG		CGC	GGT	CTG	TAC
	W	E	Р	Y	A	С	L	E	L	P	P	Q	A	G	R	G	L	Y
1389	CTC	CGC	GGT	CGC	CGC	GGT	CCG	CCT	GAG	CCA	CTG	AGT	CTC	CTG	GCT	GGG	TCC	AAA
	L	R	G	R	R	S	P	P	E	P	L	S	L	L	A	G	S	K
1443							~~-		~~~		mma	3 Cm	mm0	CITI C	000	000	тст	C A C
	GGC	CCG P	AGC S	GAG E	CCG P	GAG E	GGA G	TTG L	CTC	AAG K	F	ACT T	TTC F	L	CCC P	GGG G	S	GAC D
1497	G	Р	۵	E	P	E	G		יי	10	•	•	•		-		-	
	AAT	GCC	CTG	GAC	ACC	ACG	GCA	GAC	TGC	GGC	GGG		AGC					ACC
	N	A	L	D	T	T	A	D	С	G	G	N	S	A	D	G	E	Т
1551	CCT	TAG	ጥጥጥ	CAC	GGG	CCC	GCA	CTG	ССТ	ATG	AAC	AGC	AAG	TTC	GGT	CCC	CAG	GGG
	GG1	IAG	F	Н	G	P	A	L	<u>p</u>	M	N	S	K	F	G	P	Q	G
1605							pept											~~~
	GGC	GGG	GTG	TTA	ACC	GAC	GAG	GGG	AGG	CCC	CAC	ACA	CAC	CCC	TTC	TCT	TTT	CCC
1659	Δ C Δ	ССТ	AAG	CGC	ССТ	CAG	ACA	TAG	GGG	CCC	AGC	GTC	AGT	GGG	GGG	ATG	GGC	GGG
1713	ACA	GGI	MO	CGC	001	C110	11011	1110										
	GCT	ATG	GGC	AGG	GGC	TCT	TTT	TGC	AGC	GGC	AGG	GAG	GGG	GGC	GGG	GAG	GGG	AGG
1767	000	C	1 .00	000	OMO.	700	CAC	CCT	○ λ Ͳ	000	CCT	CTC	CAC	CCA	AGC	ጥ ል <i>ር</i>	AGG	GCC
1821	CCC	CAC	ACC	ບິບິບ	CIG	AGC	GAG	GCI	CAT	UUU	GCI	CIG	DAG	JUA	AGC	TAC		JUC
TUZ T	AAA	TAT	ATA	TAT	CTG	TCT	CTC	TCT	TCT	CTC	TCT	AAG	CTT	GGA	CCG	TGG	CGC	CAA
1875																		
1000	GTG	GCG	TGT	GTC	TGT	GCG	CGT	ACA	GGT	GTG	TCT	T.I.Y	TAT	ACG	TAT	CTC	TCC	JAG
1929																		

Fig. 1C

AAC	GTG	TGG	GCT	GCA	TGG	ATG	TGT	GTT	GGG	GGC	CTG	CCC	ACT	TGC	GCG	TGC	TGG	
GGC	AGA	GCG	AGT	GTG	TGC	CCT	GGC	AAT	GTC	AGG	TTT	GTT	GTT	TGT	CTC	TTG	ACT	1983
IGT	ACC	TCT	CAA	GCC	CCT	CCT	TGT	TCT	CTG	GTC	AAT	GCT	GGC	ATT	TTG	ATG	GGG	2037
ГТG	GAA	ACC	AAG	TCA	GAT	ATT	AAA	AAT	CAT	TTC	TCG	TGA	AAA	ΔΔΔ	ΑΑΑ	ΔΔΔ		2091





0.2kb

ACC CTA GAA GTG
T L E V AAC CIG CTG CIG PA QWGELKDANFTGP.

TCG AGC AAC TCC ACA CTG CCC CAG CTG GAC GTT ACC AGG GCC ATC SSNSTLPQLPQLP CCT V L S GCG GAC TCT AAA ATG AAT CCC GAT CTG GAC ACC GGC CAC AAC ACA TCA GCA GCC CAA TGG GGA GAG A Q W G È GCC ATT GCT GAC CTG CTG TTG AGT TTC ACA GTC CTG CCC TTC TCC GCT GTG GCC TGC AAT CGG CAC CTG CGG ACG CCC ACC AAC TAC TTC ATT GTC V A C N R H L R T P T N Y F I V ဂ ဂို CTT GOC TAC TGG GTT CTG GOG CGC ATC TTC TGT GAC ATC TGG **>** 8 ㅠ 다 ATC CTC TTT GCC ATT GTG GGC AAC ATC CTG GTC ATC TTG AAA GAT GCC AAC TTC ACT GGC CCC S V G AAC CAG ACC 0 417 363 309 255 201 147 93

Fig. 1

GCA GCG GTG GAC GTC CTG TGC TCC ATT GAT CGC TAC ATT GGG GTG CGC TAC TCT CTG CAG TAC CCC ACT CTG GTC C T A S I L S L C A I 471

ACC ATC S AGG R ATC G P L AAG GCC ATC TTG GCA CTC CTC AGT GTG TGG GTT TTG TCC ACG GTC K A I L A L L S V W V L S T V CTT GGA TGG AAA GAA CCA GCG CCC AAC GAC 633 579

TTC F GAA TGC GGA GTC ACC GAA GAA CCC TTC TAT GCC CTC TTT TCC
C G V T E E P F V A L (F) S ATC CCA CTC GCG GTC ATT CTG GTC ATG TAC TGC CGG GTC TAC ATC GTG Ġ TCC CTG GGC TCC 687

Peptide 1

AGC AGT ACC AAG GCC AAG GGC CAC AAC CCC AGG AGT TCC ATA GCT GTC AAA CTT
S S T K A K G H N P R S S I A V K I CC GCC AAG AGG AAG GAG CTG ACC CTG AGG ATC CAC TCC AAG AAC TTT CAT GAG GAC ACC ACC AAG AAC CTG GAG GCT GGA GTC ATG AAG E M TCC AAC 849 795 741

× AG TAC Y ПC ATG TTT ANG TIC TCC AGG GAA AAG AAA GCA GCC AAA ACC TTG GGC ATT GTG GTC GGA æ ලි ттс F s S AAC AGC TGC CTC AAC CCC ATC ATC TAC CCG TGC TCC AGC AAG GAG TTC

N S C L N P I I Y P C S S K E F T ACT ATC TTC ATG CGT ATC CTT GGG TGC CAG TGC CGT AGT GGC CGT CGC CGC F M R R R 116 AG TOT TOG CTC CCC TTC TTC ATC GCT CTC CCA CTT GGC TCC C1G peptide 2
ccc ccg gac gcc gtg ttc aag gtg gta ttc tgg ctg ggc
P P D A V F K V V F W L g 957

GGC GGC TCG CTG GAG CGA TCG CAG TCG CGG AAG GAC TCC CTG GAC GAC AGC GCC CTG ဂ္ဂင္ဂ GGT CGC GGA GCG CAG CCA CCA CTG GAG CTG TGC GCC TAC CCC GAA TGG M ATG AGT GGC AGC,CAG AGG ACC CTG CCC TCG GCG TCG CCC AGC CCG GCC S G R T L P S A S P S P G 1281

TAC Y

AGC S

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CGT CTG GGC GCG TGC GCT TAC ACC TAT CGG CCG TGG ACG CGC

R CCT

GAC D × § S G A L L S L P E P P G R R G R L S ရ ရ CCC CTC TTC ACT TTC AAG CTC TTG GGA GAG CCG GAG AGC CCG GCC

ACC GAG GGC GAT GCC AGO C AAT GGG GGC TGC GAC GCA ACG ACC GAC CTG GCC AAT
N G G C D A T T D L A N

525

GGG CAG CCC GGI TIC AAG AGC AAC AIG CCI CIG GCA CCC GGG CAC TII TAG GGI
G Q P G F K S N M P L A P G H F 1605
CCC TIT ICI TIC CCC CAC ACA CAC CCC AGG GGG GAG GAC ACC AIT GIG GGG GGC 1659

TGT ACC TCT CAA GCC CCT GGC AGA GCG AGT GTG TGC GAG TCC CTC TAT ACG TAT AAC GTG TGG GCT GCA TGG GGG GGC ATG GGG GGG AGT CAA CGC TGG CCG GGA CTT GCC AGG TAC AGC GGA GAG CTG GCT GCG CAT GCT GAG AGC CTG GGG ACC CAC CCC 1821 AGG GGG GAG GGC GAG AGG GGC AGC TGC TTT TCT GGC AGG GGC ATG GGT 1767 CCT TGT TCT CTG GTC AAT GCT GGC ATT TTG ATG GGG 20.91 CCT GGC AAT GTC AGG TTT GTT GTT TGT CTC TTG ACT ATG TGT GTT GGG GGC CTG CCC ACT TGC GCG TGC TGG TTA TCT GTG GGT ACA CGT GCG TGT GTC TGT GCG GTG 1929 AAG TOT CTC TCT CTC TCT CTG TAT ATA TAT AAA GTC AGC CCC GGG TAG ACA CAG GGT CGC AAG GGT ACA

Fig. 2A

	3		9		15		21		27 		33 		3 9 		45 I
1										CAC GTG					CAA GTT
46										GGT CCA					
91										AAA TTT					
136										GGA CCT					
181										GTT CAA					
	TGA	GGA	ATC	TTA	ACA	TAT	AAA	ACA	CGT	ACT TGA	CCT	CTC	GAA	CAC	GGT
	AAA	AAT	TAT	CCT	CTA	ATT	CCT	GGA	ATT		ATA	TCA	CCC	ACT	ATG
	TAC	GAA	CAT	TGT	TGT	TGT	GAT	TCT	CCG	TGG ACC	CTT	TTC	TCC	TTC	TAA
	TAG	TAC	TAA	AAC	CCC	GGT	CGG	ACC	CGA	AAT TTA	ATT	TTC	AAG	ATC	CGG
	TCG	GAT	CCG	GGT	TCA	TTC	TGG	TAG	AGA	CAA GTT	TGT	TCG	TTA	GTT	TCC
	GAC	CTC	TCA	ACA	GAG	TCG	TCT	TTA	CCC	CAT GTA	AAC	CAC	GAG	AAC	GTC
	TCC	TGA	GCC	CAG	GTT	AAG	GGT	GGT	GGG	AAA TTT	ACC	ACC	GAG	TGT	TGG
	TAG	GGT	TGA	AGT	CGA	AGT	CTC	CTG	GGG	ATG TAC	GGG	TAG	ACA	GTT	GAA
	AGT	GTC	CGT	CGT	TTC	GTC	CGT	TAC	TTA	GTA CAT	TAT	GAG	TGT	GCG	TTT
	TTT	TTT	TTT	TTT	TTT	TTT	TTC	TGT	CAT	AAT TTA	ATT	TTC	TTT	GTT	TAT
										GTA CAT					

Fig. 2B

721								CTT GAA
766								CTA GAT
811	AAA TTT							
856	AAT TTA							
901	TCC AGG							
946	TGT ACA							
991	AGA TCT							
1036	GTG CAC							
1081	GGA CCT							
1126	GAC CTG							
1171	GAA CTT							
1216	AGA TCT							
1261	GGG CCC							
1306	AAA TTT							
1351	AGC TCG							-
1396	CTA GAT							
1441	TCA AGT							

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Fig. 2C

1486	AAC TTG	CCC						
1531	CGG GCC	AAC TTG						
1576		TGA ACT						
1621		GTA CAT						
1666		GAG CTC						
1711		TTT AAA						
1756		CAA GTT						
1801		CCT GGA						
1846		TAG ATC						
1891		AAG TTC						
1936		CCT GGA						
1981		TCC AGG						
2026		CCC GGG						
2071		TTT AAA						
2116		CTA GAT						
2161		CAC GTG						
2206		GGC CCG						

Fig. 2D

2251			AAA TTT												GTG CAC
2296			AGG TCC												AAA TTT
2341			TCC												
2386			AAT TTA												
2431			ATT TAA												
2476			GTA CAT												
2521			GGC CCG												
2566			GGA CCT												
2611	GGT CCA	TTT AAA	ATC TAG	AAG TTC	GCC CGG	AAA TTT	GAG CTC	GTT CAA	GCA CGT	AGG TCC	GGG CCC	AAC TTG	TAA ATT	AGT TCA	ATA TAT
2656			GTC CAG												
2701			TTT AAA												
2746			CTC GAG												
2791			CAT GTA												
2836			ATA TAT												
2881			ACC TGG												
2926			GCG CGC												
2971			GGC CCG												

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Fig. 2E

3016							TCA AGT								
3061							AGC TCG								
3106							ACA TGT								
3151							CGC GCG								
3196					TTG	AAC	GAG CTC ‡ 2	GAC	GGC						
						-4.	7 4	56113	-						
3241							CGA GCT								
3286	GAG CTG	GTG CAC	GAC	GGC	CCG	ATC	GCT CGA 1 se	CGG	CGG GCC	GGG CCC	AGA TCT	TGA ACT	CTT GAA	CTC GAG	GCC CGG
						1 ' ''									
3336							AGA TCT								
3376							TGG ACC								
		Ρſ	JU ΙΙ	Γ											
3421	ССТ	CCC	TGG	CTA	TGG	AGG	GCG	GAC	TTT	AAA	ATG				

GGA GGG ACC GAT ACC TCC CGC CTG AAA TTT TAC